

ABSTRACT

A rear projection multi-screen display device for preventing boundary lines from appearing on a larger screen when images are projected from multiple projectors onto screens 5 to thereby form the large screen. The rear projection multi-screen display device 10 includes projectors 12 and a collective screen 16. The collective screen 16 includes short unit screens 18 and long unit screens 20, which are different in length. The projectors 12 are the same in number as the 10 short unit screens 18 and long unit screens 20, and disposed to project an optical image onto their rear end surfaces or optical image input faces. Each of the unit screens 18 and 20 is provided with multiple optical fibers 28 which have the same length in the range of 5 mm to 100 cm and are integrally joined 15 together so that their front ends and rear ends are aligned substantially in radial contact with each other. The short unit screens 18 and the long unit screens 20 are disposed in a staggered arrangement when viewed from their front, and their optical image output faces 18A and 20A are disposed adjacent to 20 each other across the collective optical image output face 16A.